



GEORGIA

DEPARTMENT OF NATURAL RESOURCES

ENVIRONMENTAL PROTECTION DIVISION

Air Quality - Part 70 Operating Permit Amendment

Facility Name: Archer Daniels Midland Company (ADM)

Facility Address: 1841 Clay Road
Valdosta, Georgia 31601, Lowndes County

Mailing Address: PO Box 1589
Valdosta, Georgia 31603-1589

Parent/Holding Company: Archer Daniels Midland Company

Facility AIRS Number: 04-13-185-00051

In accordance with the provisions of the Georgia Air Quality Act, O.C.G.A. Section 12-9-1, et seq and the Georgia Rules for Air Quality Control, Chapter 391-3-1, adopted pursuant to and in effect under the Act, the Permittee described above is issued a construction permit for:

The installation of a 144 million BTU per hour (MMBtu/hr) natural gas-fired boiler with the capability to burn fuel oil during times of gas curtailment.

This Permit Amendment shall also serve as a final amendment to the Part 70 Permit unless objected to by the U.S. EPA or withdrawn by the Division. The Division will issue a letter when this Operating Permit amendment is finalized.

This Permit Amendment is conditioned upon compliance with all provisions of The Georgia Air Quality Act, O.C.G.A. Section 12-9-1, et seq, the Rules, Chapter 391-3-1, adopted and in effect under that Act, or any other condition of this Amendment and Permit No. **2075-185-0051-V-03-0**. Unless modified or revoked, this Amendment expires upon issuance of the next Part 70 Permit for this source. This Amendment may be subject to revocation, suspension, modification or amendment by the Director for cause including evidence of noncompliance with any of the above; or for any misrepresentation made in App No. **599310** dated **November 19, 2021**; any other applications upon which this Amendment or Permit No. **2075-185-0051-V-03-0** are based; supporting data entered therein or attached thereto; or any subsequent submittal or supporting data; or for any alterations affecting the emissions from this source.

This Amendment is further subject to and conditioned upon the terms, conditions, limitations, standards, or schedules contained in or specified on the attached **24** pages.



Richard E. Dunn, Director
Environmental Protection Division

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PART 1.0 FACILITY DESCRIPTION**1.3 Process Description of Modification**

The facility proposes to install a new, natural gas-fired boiler, with a gross heat input of 144 million BTU per hour (MMBtu/hr) and the capability to burn fuel oil during times of gas curtailment.

In addition to installing the new Boiler, the Facility will remove the following units from operation:

- 95 MMBtu/hr Biomass Wellons Boiler (EU 630),
- 75 MMBtu/hr Natural gas Cleaver Brooks Boiler (EU 640),
- 52 MMBtu/hr Biomass Hurst Boiler (EU B115A), and
- 52 MMBtu/hr Biomass Hurst Boiler (EU B115B).

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Archer Daniels Midland Company (ADM)

Permit No.: 2075-185-0051-V-03-3

PART 3.0 REQUIREMENTS FOR EMISSION UNITS

Note: Except where an applicable requirement specifically states otherwise, the averaging times of any of the Emissions Limitations or Standards included in this permit are tied to or based on the run time(s) specified for the applicable reference test method(s) or procedures required for demonstrating compliance.

3.1.1 New Emission Units and Removed Emission Units

Emission Units		Specific Limitations/Requirements		Air Pollution Control Devices	
ID No.	Description	Applicable Requirements/Standards	Corresponding Permit Conditions	ID No.	Description
TBD	144 MMBtu/hr natural gas fired boiler	391-3-1-.02(2)(d) 391-3-1-.02(2)(g) 40 CFR 60, Subpart A 40 CFR 60, Subpart Db 40 CFR 63, Subpart A 40 CFR 63, Subpart DDDDD		None	N/A
630	95 MMBtu/hr Biomass Wellons Boiler	391-3-1-.02(2)(d) 391-3-1-.02(2)(g) 40 CFR 63, Subpart DDDDD	3.2.3, 3.2.6, 3.2.7, 3.2.8, 3.2.10, 3.3.3, 3.3.12 through 3.3.16, 3.3.19, 3.2.20, 3.4.3, 3.4.4, 5.2.2, 5.2.8, 5.2.10, 6.2.18 through 6.2.23	631, 632, 633	Multiclone, 2 Baghouses
640	75 MMBtu/hr Natural gas Cleaver Brooks Boiler	391-3-1-.02(2)(d) 391-3-1-.02(2)(g) 40 CFR 63, Subpart DDDDD	3.2.3, 3.2.6, 3.2.7, 3.2.9, 3.2.10, 3.3.2, 3.3.12 through 3.3.16, 3.3.17, 3.3.18, 3.4.3, 3.4.4, 5.2.2, 5.2.8, 5.2.10, 6.2.18 through 6.2.23	None	N/A
B115A	52 MMBtu/hr Biomass Hurst Boiler	40 CFR 52.21 40 CFR 60, Subpart A 40 CFR 60, Subpart De 40 CFR 63, Subpart DDDDD 391-3-1-.02(2)(d) 391-3-1-.02(2)(g) 391-3-1-.03(2)(e)	3.2.11, 3.3.3, 3.3.4, 3.3.5, 3.3.6, 3.3.7, 3.3.8, 3.3.9, 3.3.10, 3.3.11, 3.3.12 through 3.3.16, 3.3.21, 3.3.22, 4.1.3, 4.2.8, 4.2.9, 4.2.10, 5.1.1, 5.2.1, 5.2.2, 5.2.8, 5.2.9, 5.2.10, 5.2.11, 6.1.7, 6.2.18 through 6.2.26	ESP-661	Electrostatic Precipitator
B115B	52 MMBtu/hr Biomass Hurst Boiler	40 CFR 52.21 40 CFR 60, Subpart A 40 CFR 60, Subpart De 40 CFR 63, Subpart DDDDD 391-3-1-.02(2)(d) 391-3-1-.02(2)(g) 391-3-1-.03(2)(e)	3.2.11, 3.3.3, 3.3.4, 3.3.5, 3.3.6, 3.3.7, 3.3.8, 3.3.9, 3.3.10, 3.3.11, 3.3.12 through 3.3.16, 3.3.21, 3.3.22, 4.1.3, 4.2.8, 4.2.9, 4.2.10, 5.1.1, 5.2.1, 5.2.2, 5.2.8, 5.2.9, 5.2.10, 5.2.11, 6.1.7, 6.2.18 through 6.2.26	ESP-661	Electrostatic Precipitator

* Generally applicable requirements contained in this permit may also apply to emission units listed above. The lists of applicable requirements/standards and corresponding permit conditions are intended as a compliance tool and may not be definitive.

3.2 Equipment Emission Caps and Operating Limits

Modified Conditions

- 3.2.3 The Permittee shall limit fuel burned to the following fuels in the fuel burning sources listed below:
[391-3-1-.03(2)(c)]
- a. [deleted]
 - b. The CE Boiler (Source Code: 650) shall fire natural gas, distillate fuel oil, and vegetable oil.
 - c. The GTS boilers (Source Code: 701 and 705) shall burn only natural gas and distillate fuel oil.
 - d. The Hydrogen Reformer (Source Code: HP1) shall burn only natural gas and recirculated vent gas.
 - e. Grain Dryers 3 and 2 (Source Codes: 009 and 010) shall burn only natural gas.
 - f. [deleted]
- 3.2.6 The Permittee shall not discharge, or cause the discharge into the atmosphere, from the CE boiler (Source Code: 650), the reformer (Source Code: HP1), and the column grain dryers (Source Codes: 009 and 010), nitrogen oxides (NO_x) emissions in excess of 106.80 tons during any twelve consecutive months.
[PSD Avoidance and 391-3-1-.03(2)(c)]
- 3.2.7 The Permittee shall not discharge, or cause the discharge into the atmosphere, from the CE Boiler (Source Code: 650), the reformer (Source Code: HP1), and the column grain dryers (Source Codes: 009 and 010), carbon monoxide (CO) emissions in excess of 343 tons during any twelve consecutive months.
[PSD Avoidance and 391-3-1-.03(2)(c)]
- 3.2.8 [deleted]
- 3.2.9 The firing of fuel oil and vegetable oil in the boiler, with Source Code: 650 shall be limited such that the total uncontrolled emissions of sulfur dioxide (SO₂) shall not equal or exceed 40.62 tons during any consecutive twelve months. The consumption of fuel and vegetable oil shall not exceed 1,120,000 gallons during any twelve consecutive months.
[PSD Avoidance and 391-3-1-.03(2)(c)]
- 3.2.11 [deleted]
- 3.2.12 [deleted]

New Condition

- 3.2.13 While burning natural gas, the Permittee shall not cause, let, suffer, permit or allow the emission of nitrogen oxides (NOx) from the Victory Boiler (Source Code: TBD) in amounts equal to or exceeding 0.046 lb/MMBtu on a 30-day rolling average.
[Avoidance of 40 CFR 52.21(j)]

3.3 Equipment Federal Rule Standards**Modified Conditions**

- 3.3.2 Fuel oil fired in the CE Boiler (Source Code: 650), and the GTS Boilers (Source Codes: 701 and 705) shall be distillate fuel oil and shall contain no more than 0.5 percent sulfur by weight. Distillate fuel oil means fuel oil that complies with the specifications for fuel oil numbers 1 or 2, as defined by the American Society for Testing and Materials in ASTM D396, "Standard Specification for Fuel Oils". Vegetable oil fired in the boilers, with Source Codes: 650 and 705 shall not contain more than 0.5% sulfur by weight.
[40 CFR 60.42c(d), 391-3-1-.03(2)(g)(subsumed)]
- 3.3.3 The Permittee shall comply with all applicable provisions of the New Source Performance Standards (NSPS) as found in 40 CFR Part 60, Subpart A - "General Provisions" and 40 CFR Part 60, Subpart Dc - "Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units," for operation of the boilers with Source Codes: 701 and 705.
[40 CFR 60 Subparts A and Dc]
- 3.3.6 [deleted]
- 3.3.7 [deleted]
- 3.3.8 [deleted]
- 3.3.9 [deleted]
- 3.3.10 [deleted]
- 3.3.11 [deleted]
- 3.3.12 The Permittee shall comply with all applicable provisions of the "National Emission Standards for Hazardous Air Pollutants" as found in 40 CFR 63 Subpart A General Provisions, and 40 CFR 63 Subpart DDDDD, National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters, for all applicable boilers, including GTS Boilers (Source Codes: 701 and 705), CE Boiler (Source Code: 650) and the **Victory Boiler (Source Code: TBD)**.
[40 CFR 63 Subparts A and DDDDD]
- 3.3.13 [Deleted]

GTS Boilers (Source Code 701 and 705), Cleaver Brooks and CE Boiler (Source Code 650), Victory Boiler (Source Code TBD)

- 3.3.17 The GTS Boilers (Source Code 701 and 705) and CE Boiler (Source Code 650) are designated as an industrial boiler in the “Units Designed to Burn Gas 1” subcategory, with a heat input greater than 10 million Btu/hour.
[40 CFR 63.7499(l); 40 CFR 63.7575]

Wellons Boiler (Source Code 630)

3.3.19 [deleted]

3.3.20 [deleted]

Hurst Boilers (Source Codes 115A and 115B)

3.3.21 [deleted]

3.3.22 [deleted]

New Conditions

- 3.3.23 The Permittee shall comply with all applicable provisions of the New Source Performance Standards (NSPS) as found in 40 CFR 60 Subpart A – “General Provisions” and 40 CFR 60 Subpart Db – “Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units,” for operation of the Victory Boiler (Source Code: TBD).
[40 CFR 60.40b]
- 3.3.24 For the purposes of 40 CFR 63 Subpart DDDDD, the Victory Boiler (Source Code TBD) is classified as a unit designed to burn gas 1 fuels subcategory boiler. This subcategory includes any boiler or process heater that burns only natural gas, refinery gas, and/or other gas 1 fuels. Gaseous fuel boilers and process heaters that burn liquid fuel for periodic testing of liquid fuel, maintenance, or operator training, not to exceed a combined total of 48 hours during any calendar year, are included in the definition. Gaseous fuel boilers and process heaters that burn liquid fuel during periods of gas curtailment or gas supply interruptions of any duration are also included in the definition.
[40 CFR 63.7575]
- 3.3.25 For the purposes of compliance with the SO₂ provisions of 40 CFR 60 Subpart Db, the Permittee shall burn no fuel other than natural gas or very low sulfur oil in the Victory Boiler (Source Code: TBD). Very low sulfur fuel oil as defined in 40 CFR 60 Subpart Db means an oil that contains no more than 0.30 weight percent sulfur.
[40 CFR 60.42b(k)(2); 40 CFR 60.43b(h)(5); 391-3-1-.02(2)(g) Subsumed for Oil]

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- 3.3.26 The Permittee shall not discharge or cause the discharge into the atmosphere from the Victory Boiler (Source Code TBD) any gases which exhibit opacity of which is equal to or greater than 20 percent opacity (six-minute average), except for one six-minute period per hour of not more than 27 percent opacity. This opacity standard applies during all times of operation, except during periods of startup, shutdown, and malfunction.
[40 CFR 60.43b(f); 40 CFR 60.43b(g); 391-3-1-.02(2)(d)3.]
- 3.3.27 The Permittee shall not discharge or cause the discharge into the atmosphere from the Victory Boiler (Source Code: TBD) any gases which contain NO_x in excess of 0.20 lb/MMBtu on a 30-day rolling average, including periods of startup, shutdown, and malfunction while burning any fuel.
[40 CFR 60.44b(h); 40 CFR 60.44b(i); 40 CFR 60.44b(l)(1)]
- 3.3.28 The Permittee shall comply with the work practice standards specified below in Table 3.3.28 for Victory Boiler (Source Code: TBD):
[40 CFR 63.7500(a)(1), 63.7505(a), Table 3 of 40 CFR 63 Subpart DDDDD]

Table 3.3.28: Work Practice Standards for Boiler TBD

If your unit is...	You must meet the following...
1. A new or existing boiler or process heater without a continuous oxygen trim system and with heat input capacity of 10 million Btu per hour or greater. Boiler TBD	Conduct a tune-up of the boiler or process heater annually as specified in Condition 5.2.20. Units in either the Gas 1 or Metal Process Furnace subcategories will conduct this tune-up as a work practice for all regulated emissions under this subpart.

3.4 Equipment SIP Rule Standards

Modified Conditions

- 3.4.3 The Permittee shall not discharge or cause the discharge into the atmosphere from the boilers with Source Codes: 650, 701, and 705, the hydrogen reformer (Source Code: HP1), and the **Victory Boiler (Source Code: TBD)** any gases which:
[391-3-1-.02(2)(d)3 and 391-3-1-.02(2)(d)2.(ii)]
- Exhibit visible emissions the opacity of which is equal to or greater than 20 percent opacity except for one 6-minute period per hour of not more than 27 percent opacity.
 - Contain particulate matter (PM) in excess of the rate derived from $P = 0.5 \cdot (10/R)^{0.5}$ where P equals the allowable emission rate in pounds per million BTU heat input and R equals the heat input rate in million BTU per hour from the emission unit.
- 3.4.4 The Permittee shall not burn, in the fuel burning sources (Source Codes: 650, 701, 705, HP1, 009, and 010), any fuel with a fuel sulfur content exceeding 2.5%, by weight.
[391-3-1-.02(2)(g)2]

PART 4.0 REQUIREMENTS FOR TESTING**4.1 General Testing Requirements****Modified Conditions**

4.1.3 Performance and compliance tests shall be conducted and data reduced in accordance with applicable procedures and methods specified in the Division's Procedures for Testing and Monitoring Sources of Air Pollutants. The methods for the determination of compliance with emission limits listed under Sections 3.2, 3.3, 3.4 and 3.5 which pertain to the emission units listed in Section 3.1 are as follows:

- l. [deleted]
- m. [deleted]
- n. [deleted]

Minor changes in methodology may be specified or approved by the Director or his designee when necessitated by process variables, changes in facility design, or improvement or corrections that, in his opinion, render those methods or procedures, or portions thereof, more reliable.

[391-3-1-.02(3)(a)]

4.2 Specific Testing Requirements**Modified Conditions**

- 4.2.1 [deleted]
- 4.2.2 [deleted]
- 4.2.3 [deleted]

4.2.4 Within 90 days of burning vegetable oil in the boiler with Source Code: 650, the Permittee shall conduct performance tests for PM-10, CO and NO_x emissions from that boiler, while firing vegetable oil. The same boiler shall also be tested for PM-10, CO and NO_x emissions while burning #2 fuel oil. The results of the performance tests shall be submitted to the Division within 60 days of the completion of the testing.

[391-3-1-.02(6)(b)]

- 4.2.6 [deleted]
- 4.2.8 [deleted]
- 4.2.9 [deleted]

4.2.10 [deleted]

New Conditions

4.2.11 Within 60 days after the initial firing of fuel oil, the Permittee shall conduct the initial performance testing for opacity from the Victory Boiler (Source Code TBD) while firing oil as required under 40 CFR 60.8 and shall conduct subsequent performance tests as requested by the Division, to determine compliance with the standards using the procedures and reference methods in 40 CFR 60.46b(d).
[40 CFR 60.46b(d)]

4.2.12 For the Victory Boiler (Source Code: TBD), to determine compliance with the emission limits for NO_x required under Condition 3.3.27, the Permittee shall conduct performance tests as required under 40 CFR 60.8 using the NO_x continuous system for monitoring required by Condition 5.2.17:
[40 CFR 60.46b(e)(1) and (3)]

- a. For the initial compliance test, NO_x from a boiler is monitored for 30 successive steam generating unit operating days and the 30-day average emission rate is used to determine compliance with the NO_x emission standards under Condition 3.3.27. The 30-day average emission rate is calculated as the average of all hourly emissions data recorded by the monitoring system during the 30-day test period.
- b. Following the date on which the initial performance test is completed or is required to be completed under 40 CFR 60.8, whichever date comes first, the Permittee shall determine compliance with the NO_x standard under Condition 3.3.27 on a continuous basis using a 30-day rolling average emission rate. A new 30-day rolling average emission rate is calculated each steam generating unit operating day as the average of all the hourly NO_x emission data for the preceding 30 steam generating unit operating days.

4.2.13 Within 13 months of the initial startup of the Victory Boiler (Source Code: TBD), the Permittee shall conduct the initial tune-up required by 40 CFR 63 Subpart DDDDD as specified in 40 CFR 63.7510. Subsequent tune-ups shall be conducted according to 40 CFR 63.7515(d) and 40 CFR 63.7540 as applicable.
[40 CFR 63.7510; 40 CFR 63.7515; 40 CFR 63.7540]

PART 5.0 REQUIREMENTS FOR MONITORING (Related to Data Collection)**5.2 Specific Monitoring Requirements****Modified Conditions**

5.2.1 [deleted]

5.2.2 The Permittee shall install, calibrate, maintain, and operate a system to continuously monitor and record the indicated parameters on the following equipment. Where such performance specification(s) exist, each system shall meet the applicable performance specification(s) of the Division's monitoring requirements.
[391-3-1-.02(6)(b)1 and 40 CFR 70.6(a)(3)(i)]

- a. Natural gas, fuel oil, and vegetable oil consumption in the CE boiler (Source Code: 650), and the GTS boiler (Source Code: 705). Data shall be recorded monthly.
- b. [unchanged]
- c. [unchanged]
- d. Pressure drop from the following baghouses: Rail Pit, Nos. 1 and 2 (Source Codes: 001 and 002), Bean Cleaning and Distribution (Source Code: 044), Truck Dump (Source Code: 044), Grain Bean Cleaner (Source Code: 107), Fluidized-Bed Dryer (Source Code: 122), Cracking Rolls (Source Code: 130), Secondary Dehulling (Source Code: 141), Bean Conditioner VSC (Source Code: 145), Flaking Roll (Prep-wet) (Source Code: 151), Secondary Dehuller (Source Code: 170), Hull Grinder (Source Code: 182), Meal/Hull Loadout (Source Code: 311), Meal Grinder (Source Code: 331), Clay Storage (Source Code: 341), and Bleaching Clay Receiving (Source Code: 711). The pressure drop shall be recorded at least once per operating week.
- e. [unchanged]
- f. [deleted]
- g. [deleted]

5.2.7 The Permittee shall monitor the nitrogen oxides (NO_x) and the carbon monoxide (CO) from the emission units with Source Codes: 650, and HP1, using the following plan:
[391-3-1-.02(6)(b)1 and 40 CFR 70.6(a)(3)(i)]

- a. [unchanged]
- b. [deleted]
- c. [deleted]

d. [unchanged]

e. [unchanged]

f. [unchanged]

5.2.8 [deleted]

5.2.9 [deleted]

New Conditions

5.2.17 The Permittee shall install, calibrate, maintain, and operate a system to continuously monitor and record the indicated pollutants on the following equipment. Each system shall meet the applicable performance specification(s) of the Division's monitoring requirements.
[391-3-1-.02(6)(b)1 and 40 CFR 70.6(a)(3)(i)]

a. NO_x and O₂ (or CO₂) from the Victory Boiler (Source Code: TBD).
[40 CFR 60.48b(b)(1)]

5.2.18 The Permittee shall obtain NO_x emissions data for the Victory Boiler (Source Code: TBD) for at least 75 percent of the operating hours in at least 22 out of 30 successive boiler operating days. If this minimum data requirement for a boiler is not met, the Permittee shall supplement the emission data with data collected using Method 7, Method 7A, or other approved reference methods used as a standby monitoring system providing the minimum data requirement defined in this condition. The 1-hour average NO_x emission rates for each boiler, expressed in pound(s) per million BTU heat input, must include at least two data points to calculate each 1-hour average. Hourly NO_x emission rates are not calculated if a boiler is operated less than 30 minutes in a 1-hour period and are not counted toward the determination of a steam generating unit-operating day.
[40 CFR 60.48(d) and (f); 40 CFR 60.13]

5.2.19 For all CEMS installed on the Victory Boiler (Source Code: TBD), the Permittee shall perform quarterly accuracy determinations and daily calibration drift tests in accordance with Appendix F of 40 CFR Part 60.
[40 CFR 60.13]

5.2.20 The Permittee shall conduct an annual tune-up of Victory Boiler (Source Code: TBD) to demonstrate continuous compliance as specified in paragraphs a. through f. of this condition. Each annual tune-up must be no more than 13 months after the previous tune-up.
[40 CFR 63.7540, 63.7515, Table 3 to 40 CFR 63 Subpart DDDDD]

a. As applicable, inspect the burner, and clean or replace any components of the burner as necessary (the burner inspection may be delayed until the next scheduled unit shutdown). Units that produce electricity for sale may delay the burner inspection until the first outage, not to exceed 36 months from the previous inspection. At units where entry into a piece of process equipment or into a storage vessel is required to

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complete the tune-up inspections, inspections are required only during planned entries into the storage vessel or process equipment.

- b. Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available;
- c. Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly (the inspection may be delayed until the next scheduled unit shutdown). Units that produce electricity for sale may delay the inspection until the first outage, not to exceed 36 months from the previous inspection;
- d. Optimize total emissions of CO. This optimization should be consistent with the manufacturer's specifications, if available, and with any NOx requirement to which the unit is subject;
- e. Measure the concentrations in the effluent stream of CO in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer; and
- f. Maintain on-site and submit, if requested by the Division, an annual report containing the information in paragraphs i. through iii. below,
 - i. The concentrations of CO in the effluent stream in parts per million by volume, and oxygen in volume percent, measured at high fire or typical operating load, before and after the tune-up of the boiler or process heater;
 - ii. A description of any corrective actions taken as a part of the tune-up; and
 - iii. The type and amount of fuel used over the 12 months prior to the tune-up, but only if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel used by each unit.

5.2.21 Following the initial opacity performance test for opacity for Victory Boiler (Source Code TBD) required by Condition 4.2.11, the Permittee shall comply with either paragraph a., b., or c. of this condition when burning very low sulfur diesel fuel. The observation period for Method 9 of appendix A-4 of 40 CFR Part 60 performance tests may be reduced from 3 hours to 60 minutes if all 6-minute averages are less than 10 percent and all individual 15-second observations are less than or equal to 20 percent during the initial 60 minutes of observation. [391-3-1-.02(6)(b)1, 40 CFR 60.48b(a)(1) and 40 CFR 70.6(a)(3)(i)]

- a. Except as provided in paragraph b. and c. of this condition, the Permittee shall conduct subsequent Method 9 of appendix A-4 of 40 CFR Part 60 performance tests using the procedures in this condition according to the applicable schedule in paragraphs a.i.

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through a.iv. of this condition, as determined by the most recent Method 9 of appendix A-4 of 40 CFR Part 60 performance test results.

- i. If no visible emissions are observed, a subsequent Method 9 of appendix A-4 of 40 CFR Part 60 performance test must be completed within 12 calendar months from the date that the most recent performance test was conducted or within 45 days of the next day that fuel with an opacity standard is combusted, whichever is later;
 - ii. If visible emissions are observed but the maximum 6-minute average opacity is less than or equal to 5 percent, a subsequent Method 9 of appendix A-4 of 40 CFR Part 60 performance test must be completed within 6 calendar months from the date that the most recent performance test was conducted or within 45 days of the next day that fuel with an opacity standard is combusted, whichever is later;
 - iii. If the maximum 6-minute average opacity is greater than 5 percent but less than or equal to 10 percent, a subsequent Method 9 of appendix A-4 of 40 CFR Part 60 performance test must be completed within 3 calendar months from the date that the most recent performance test was conducted or within 45 days of the next day that fuel with an opacity standard is combusted, whichever is later; or
 - iv. If the maximum 6-minute average opacity is greater than 10 percent, a subsequent Method 9 of appendix A-4 of 40 CFR Part 60 performance test must be completed within 45 calendar days from the date that the most recent performance test was conducted.
- b. If the maximum 6-minute opacity is less than 10 percent during the most recent Method 9 of appendix A-4 of 40 CFR Part 60 performance test, the Permittee may, as an alternative to performing subsequent Method 9 of appendix A-4 of 40 CFR Part 60 performance tests, elect to perform subsequent monitoring using Method 22 of appendix A-7 of 40 CFR Part 60 according to the procedures specified in paragraphs b.i. and b.ii. of this condition.
- i. The Permittee shall conduct 10 minute observations (during normal operation) each operating day the affected facility fires fuel for which an opacity standard is applicable using Method 22 of appendix A-7 of 40 CFR Part 60 and demonstrate that the sum of the occurrences of any visible emissions is not in excess of 5 percent of the observation period (i.e., 30 seconds per 10 minute period). If the sum of the occurrence of any visible emissions is greater than 30 seconds during the initial 10 minute observation, immediately conduct a 30 minute observation. If the sum of the occurrence of visible emissions is greater than 5 percent of the observation period (i.e., 90 seconds per 30 minute period), the Permittee shall either document and adjust the operation of the facility and demonstrate within 24 hours that the sum of the occurrence of visible emissions is equal to or less than 5 percent during a 30 minute observation (i.e., 90 seconds) or conduct a new Method 9 of appendix A-4 of 40 CFR Part 60 performance test using the procedures in this condition within 45 calendar days according to the requirements in 40 CFR 60.46d(d)(7).

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- ii. If no visible emissions are observed for 10 operating days during which an opacity standard is applicable, observations can be reduced to once every 7 operating days during which an opacity standard is applicable. If any visible emissions are observed, daily observations shall be resumed.
 - c. If the maximum 6-minute opacity is less than 10 percent during the most recent Method 9 of appendix A-4 of 40 CFR Part 60 performance test, the Permittee may, as an alternative to performing subsequent Method 9 of appendix A-4 performance tests, elect to perform subsequent monitoring using a digital opacity compliance system according to a site-specific monitoring plan approved by the Division. The observations shall be similar, but not necessarily identical, to the requirements in paragraph b. of this condition. For reference purposes in preparing the monitoring plan, see OAQPS "Determination of Visible Emission Opacity from Stationary Sources Using Computer-Based Photographic Analysis Systems." This document is available from the U.S. Environmental Protection Agency (U.S. EPA); Office of Air Quality and Planning Standards; Sector Policies and Programs Division; Measurement Policy Group (D243-02), Research Triangle Park, NC 27711. This document is also available on the Technology Transfer Network (TTN) under Emission Measurement Center Preliminary Methods.
- 5.2.22 The Permittee shall submit excess emission reports for any excess emissions from Victory Boiler TBD that occur during the reporting period and maintain records according to the requirements specified in paragraphs (a) or (b) of this condition, as applicable, depending on the visible emissions monitoring method used.
[391-3-1-.02(6)(b)1, 40 CFR 60.48b and 40 CFR 70.6(a)(3)(i)]
- a. For each performance test conducted using Method 9, the Permittee shall keep records, including the information specified in paragraphs (a)(i) through (iii) of this condition.
 - i. Dates and time intervals of all opacity observation periods;
 - ii. Name, affiliation, and copy of current visible emission reading certification for each visible emission observer participating in the performance test; and
 - iii. Copies of all visible emission observer opacity field data sheets.
 - c. For each performance test conducted using Method 22, the Permittee shall keep records, including the information specified in paragraphs (b)(i) through (iv) of this condition:
 - i. Dates and time intervals of all visible emissions observation periods;
 - ii. Name and affiliation for each visible emission observer participating in the performance test;
 - iii. Copies of all visible emission observer opacity field data sheets; and

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- iv. Documentation of any adjustments made and the time the adjustments were completed to the affected facility operation by the Permittee to demonstrate compliance with the applicable monitoring requirements.

PART 6.0 OTHER RECORD KEEPING AND REPORTING REQUIREMENTS**6.1 General Record Keeping and Reporting Requirements****Modified Conditions**

6.1.7 For the purpose of reporting excess emissions, exceedances or excursions in the report required in Condition 6.1.4, the following excess emissions, exceedances, and excursions shall be reported:

[391-3-1-.02(6)(b)1 and 40 CFR 70.6(a)(3)(iii)]

a. Excess emissions: (means for the purpose of this Condition and Condition 6.1.4, any condition that is detected by monitoring or record keeping which is specifically defined, or stated to be, excess emissions by an applicable requirement)

i. [unchanged]

ii. [unchanged]

iii. Any 30-day rolling average during which the NO_x emissions for the Victory Boiler (Source Code: TBD), measured and recorded in accordance with Condition 5.2.18, are in excess of 0.20 lb/MMBtu heat input when burning any fuel.

[40 CFR 60.49b(h)]

b. Exceedances: (means for the purpose of this Condition and Condition 6.1.4, any condition that is detected by monitoring or record keeping that provides data in terms of an emission limitation or standard and that indicates that emissions (or opacity) do not meet the applicable emission limitation or standard consistent with the averaging period specified for averaging the results of the monitoring)

i. [unchanged]

ii. [unchanged]

iii. Any 12-consecutive month period that the total fuel oil and vegetable oil consumption in the boilers with Source Codes: 650 and 705 exceeds 1,120,000 gallons.

iv. [unchanged]

v. [unchanged]

vi. Any time during which fuel oil is combusted with a sulfur content greater than 0.5 percent, by weight, in the CE boiler (Source Code: 650), or the GTS boilers (Source Codes: 701, and SC 705).

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- vii. [deleted]
- viii. [deleted]
- ix. [unchanged]
- x. [unchanged]
- xi. [unchanged]
- xii. [deleted]
- xiii. [deleted]
- xiv. [deleted]
- xv. [deleted]
- xvi. Any period of process operation during which the facility burns fuel in the Victory Boiler (Source Code: TBD) that is other than natural gas or oil meeting the definition of very low sulfur fuel oil as defined in 40 CFR 60 Subpart Db and meeting the sulfur content limit in Condition 3.2.25.
[40 CFR 60.42b(k)(2); 391-3-1-.03(2)(c); 391-3-1-.02(2)(g)]
- xvii. Any time during which the opacity of gases from the Victory Boiler TBD is equal to or exceeds the opacity limit in Permit Condition 3.3.26.
- xviii. Any 30-day rolling average during which the NO_x emissions for the Victory Boiler (Source Code: TBD), measured and recorded in accordance with Condition 5.2.18, are in excess of 0.046 lb/MMBtu heat input when burning natural gas.
[Avoidance of 40 CFR Part 52.21]
- c. Excursions: (means for the purpose of this Condition and Condition 6.1.4, any departure from an indicator range or value established for monitoring consistent with any averaging period specified for averaging the results of the monitoring)
 - i. [unchanged]
 - ii. [unchanged]
 - iii. [unchanged]

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- iv. Any measurement of NO_x from the specified sources firing the specified fuels in accordance with Condition 5.2.7 that exceeds:

<u>Source Codes</u>	<u>Fuel</u>	<u>Emission factor</u>
650	natural gas	0.0363 lb/MMBtu
HP1	natural gas/vent gas	0.2844 lb/MMBtu
650	fuel oil/vegetable oil	0.143 lb/MMBtu

- v. Any measurement of CO from the specified sources firing the specified fuels in accordance with Condition 5.2.7 that exceeds:

<u>Source Codes</u>	<u>Fuel</u>	<u>Emission factor</u>
650	natural gas	0.040 lb/MMBtu
HP1	natural gas/vent gas	0.2389 lb/MMBtu
650	fuel oil/vegetable oil	0.0357 lb/MMBtu

- vi. [unchanged]

- vii. [deleted]

- viii [unchanged]

- d. In addition to the excess emissions, exceedances and excursions specified above, the following should also be included with the report required in Condition 6.1.4:

- i. [unchanged]

- ii. A statement certifying that only fuel meeting the definition of natural gas under 40 CFR 60.41b or fuel oil meeting the definition of very low sulfur fuel oil under 40 CFR 60.41b was burned in the Victory Boiler (Source Code: TBD) during the reporting period.

- iii. Any time the annual tune up required under 40 CFR 63 Subpart DDDDD is not performed on Victory Boiler (Source Code: TBD) within 13 months of the previous tune-up except as specified in Permit Condition 5.2.20.

6.2 Specific Record Keeping and Reporting Requirements

Modified Conditions

6.2.2 For each shipment of distillate fuel oil (Numbers 1 or 2) received for combustion, in the boilers with Source Codes: 650, 701, and 705, the Permittee shall obtain from the fuel supplier a statement that the fuel oil complies with the specifications for Number 2 fuel oil as defined in ASTM D396 - Standard Specifications for Fuel Oil. Verification of the fuel oil supplies shall contain a statement from the owner or operator of the facility stating that the records of fuel supplier certifications submitted represent all of the fuel oil combusted during the quarter.

[391-3-1-.02(6)(b)1, 391-3-1-.03(2)(c), 40 CFR 60.48c(e,g,j), and 40 CFR 70.6(a)(3)(i)]

6.2.3 The Permittee shall maintain monthly records that specify the quantity of each fuel (natural gas, distillate fuel oil, and vegetable oil, as allowed per Condition 3.2.3) consumed by each of the following sources, unless otherwise noted.

[40 CFR 70.6(a)(3)(i) and 40 CFR 60.48c(e)(11)]

a. Natural gas, distillate fuel oil, and vegetable oil in the boilers with Source Codes: 650, and 705.

b. Natural gas and distillate fuel oil in the boiler with Source Code: 701.

c. Natural gas in the reformer (Source Code: HP1).

d. Natural gas usage in the column grain dryers (Source Codes: 009 and 010). Usage records can be combined for these two sources.

e. [deleted]

6.2.4 [deleted]

6.2.5 The total monthly emissions of carbon monoxide (CO) due to combustion of fuel in the boiler with Source Code: 650, the grain dryers (Source Codes: 009 and 010) and the reformer (Source Code: HP1) to demonstrate compliance with Condition 3.2.7 of this permit, shall be calculated according to the following equation:

[391-3-1-.02(7)]

$$\text{CO} = [40 \times \text{Total Mo. Nat. Gas for SC 650 (MMft}^3)] + [84 \times \text{Total Mo. Nat. Gas and Vent Gas for SC HP1 (MMft}^3)] + [84 \times \text{Total Mo. Nat. Gas for Grain dryers SCs 009 and 010 (MMft}^3)] + [5 \times \text{Total Mo. \#2 Fuel Oil and Vegetable oil for SC 650 (Mgal)]$$

Each month, the Permittee shall calculate the cumulative total CO emissions for the last twelve consecutive months. The cumulative totals include the total amount of CO emissions during the current month plus the cumulative total CO emissions in the previous eleven consecutive months. Should subsequent tests determine that the emission factors are different from those used in the above equation, the Permit may be amended to modify the

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factors in accordance with normal permitting procedures. These emission factor records shall be available for inspection or submittal to the Division and shall be retained for a period of five years following the date of record.

6.2.6 [deleted]

6.2.7 The total monthly emissions of nitrogen oxides (NO_x) in pounds due to the combustion of fuel in the boiler with Source Code: 650; the grain dryers (Source Codes: 009 and 010); and the reformer (Source Code: HP1) shall be calculated according to the following equation to demonstrate compliance with Condition 3.2.6:
[391-3-1-.02(7)]

$$\text{NO}_x = [36.3 \times \text{Total Mo. Nat. Gas for SC 650 (MMft}^3\text{)}] + [100 \times \text{Total Mo. Nat. Gas and Vent Gas for SC HP1 (MMft}^3\text{)}] + [100 \times \text{Total Mo. Nat. Gas for Grain dryers SCs 009 and 010 (MMft}^3\text{)}] + [20 \times \text{Total Mo. \#2 Fuel Oil and Vegetable oil for 650 (Mgal)}]$$

Each month, the Permittee shall calculate the cumulative total NO_x emissions for the last twelve-consecutive months. The cumulative totals include the total amount of NO_x emission during the current month plus the cumulative total NO_x emission in the last eleven consecutive months. Should subsequent tests determine that the emission factors are different from those used in the above equation, the Permit may be amended to modify the factors in accordance with normal permitting procedures. Such emission factor records shall be kept available for inspection or submittal to the Division and shall be retained for a period of five years following the date of record.

6.2.15 [deleted]

6.2.16 [deleted]

6.2.21 Periodic compliance reports are required for the industrial boilers subject to Subpart DDDDD as specified in Table 9 of this subpart. The compliance reports are due as follows:
[40 CFR 63.7550 (b) and (c), Table 9 to Subpart DDDDD]

a. [unchanged]

b. [unchanged]

c. Boilers HP1, 650, 701 and 705 are subject only to annual or 5-year compliance reporting, depending on the tune-up schedule per Condition 3.3.15.

6.2.24 [deleted]

6.2.26 [deleted]

New Conditions

- 6.2.27 The Permittee shall submit an Initial Notification to the Division no later than 15 days after the actual date of the startup of the Victory Boiler (Source Code: TBD) as required by 40 CFR 60.7, 60.49b(a), and 40 CFR 63 Subpart DDDDD.
[40 CFR 60.49b(a) and 40 CFR 63.7545(c)]
- 6.2.28 The Permittee shall submit to the Division the performance test data from the initial performance tests and the performance evaluations of the CEMS as specified by 40 CFR 60.49b(b) for the Victory Boiler (Source Code: TBD).
[40 CFR 60.49b(b)]
- 6.2.29 The Permittee shall record and maintain records of the amounts of each fuel combusted in the Victory Boiler (Source Code: TBD) during each day and calculate the annual capacity factor for natural gas and oil for each boiler for the reporting period. The annual capacity factor is determined on a 12-month rolling average basis with a new annual capacity factor calculated at the end of each calendar month.
[40 CFR 60.49b(d)(1)]
- 6.2.30 The Permittee shall maintain records of opacity for the Victory Boiler (Source Code TBD). For opacity monitored according to Condition 5.2.21, the Permittee shall maintain records according to the requirements specified in paragraphs a. though c. of this condition, as applicable, to the visible emissions monitoring method used.
[40 CFR 60.49b(f)]
- a. For each performance test conducted using Method 9 of appendix A-4 of 40 CFR Part 60, the Permittee shall keep the records including the following information:
 - i. Dates and time intervals of all opacity observation periods;
 - ii. Name, affiliation, and copy of current visible emission reading certification for each visible emission observer participating in the performance test; and
 - iii. Copies of all visible emission observer opacity field data sheets.
 - d. For each performance test conducted using Method 22 of appendix A-4 of 40 CFR Part 60, the Permittee shall keep the records including the following information:
 - i. Dates and time intervals of all visible emissions observation periods;
 - ii. Name and affiliation for each visible emission observer participating in the performance test;
 - iii. Copies of all visible emission observer opacity field data sheets; and

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- iv. Documentation of any adjustments made and the time the adjustments were completed to the affected facility operation by the Permittee to demonstrate compliance with the applicable monitoring requirements.
 - c. For each digital opacity compliance system, the Permittee shall maintain records and submit reports according to the requirements specified in the site-specific monitoring plan approved by the Division.
- 6.2.31 The Permittee shall maintain records of the following information for each steam generating unit operating day for the Victory Boiler (Source Code: TBD).
[40 CFR 60.49b(g)]
 - a. Calendar date;
 - b. The average hourly NO_x emission rates (expressed as NO₂) (ng/J or lb/MMBtu heat input) measured or predicted;
 - c. The 30-day average NO_x emission rates (ng/J or lb/MMBtu heat input) calculated at the end of each steam generating unit operating day from the measured or predicted hourly NO_x emission rates for the preceding 30 steam generating unit operating days;
 - d. Identification of the steam generating unit operating days when the calculated 30-day average NO_x emission rates are in excess of the NO_x emissions standards under 40 CFR 60.44b, with the reasons for such excess emissions as well as a description of corrective actions taken;
 - e. Identification of the steam generating unit operating days for which pollutant data have not been obtained, including reasons for not obtaining sufficient data and a description of corrective actions taken;
 - f. Identification of the times when emission data have been excluded from the calculation of average emission rates and the reasons for excluding data;
 - g. Identification of "F" factor used for calculations, method of determination, and type of fuel combusted;
 - h. Identification of the times when the pollutant concentration exceeded full span of the CEMS;
 - i. Description of any modifications to the CEMS that could affect the ability of the CEMS to comply with Performance Specification 2 or 3; and
 - j. Results of daily CEMS drift tests and quarterly accuracy assessments as required under appendix F, Procedure 1 of 40 CFR Part 60.

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- 6.2.32 For the Victory Boiler, the Permittee shall obtain and maintain fuel receipts (such as a current, valid purchase contract, tariff sheet, or transportation contract) from the fuel supplier that certify that the oil meets the definition of distillate oil and contains no more than 0.30 weight percent sulfur, and the gaseous fuel meets the definition of natural gas as defined in 40 CFR 60.41b. For the purposes of this section, the distillate oil need not meet the fuel nitrogen content specification in the definition of distillate oil.
[40 CFR 60.49b(r)(1); 391-3-1-.03(2)(c)]
- 6.2.33 The Permittee shall submit a notification of alternative fuel use within 48 hours of the declaration of each period of natural gas curtailment or supply interruption, as defined in 40 CFR 63.7575 for the operation of the Victory Boiler (Source Code: TBD). The notification must include the following information:
[40 CFR 63.7545(f)]
- a. Company name and address.
 - b. Identification of the affected unit.
 - c. Reason the Permittee is unable to use natural gas or equivalent fuel, including the date when the natural gas curtailment was declared or the natural gas supply interruption began.
 - d. Type of alternative fuel that the Permittee intends to use.
 - e. Dates when the alternative fuel use is expected to begin and end.
- 6.2.34 For 40 CFR 63 Subpart DDDDD, the Permittee shall submit periodic reports as specified in 40 CFR 63.7550 and Table 9 of 40 CFR 63 Subpart DDDDD on the schedule specified in 40 CFR 63.7550(b) for the operation of the Victory Boiler (Source Code: TBD). The reports shall contain the following:
[40 CFR 63.7550]
- a. Information required in 40 CFR 63.7550(c)(1) through (5);
 - b. If there are no deviations from any emission limitation (emission limit and operating limit) that applies and there are no deviations from the requirements for work practice standards in Table 3 of 40 CFR 63 Subpart DDDDD that apply, a statement that there were no deviations from the emission limitations and work practice standards during the reporting period. If there were no periods during which the CMSs, including continuous emissions monitoring system and operating parameter monitoring systems, were out-of-control as specified in 40 CFR 63.8(c)(7), a statement that there were no periods during which the CMSs were out-of-control during the reporting period; and
 - c. If there is a deviation from any emission limitation (emission limit and operating limit) where a CMS is not used to comply with that emission limit or operating limit,

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or a deviation from a work practice standard during the reporting period, the report must contain the information in 40 CFR 63.7550(d); and

- d. If there were periods during which the CMSs, including continuous emissions monitoring system and operating parameter monitoring systems, were out-of-control as specified in 40 CFR 63.8(c)(7), or otherwise not operating, the report must contain the information in 40 CFR 63.7550(e).

6.2.35 For 40 CFR 63 Subpart DDDDD, the Permittee shall maintain the following records for the operation of the Victory Boiler (Source Code: TBD).
[40 CFR 63.7555]

- a. A copy of each notification and report submitted by the Permittee to comply with 40 CFR 63 Subpart DDDDD, including all documentation supporting any Initial Notification or Notification of Compliance Status or semiannual compliance reports, according to the requirements in 40 CFR 63.10(b)(2)(xiv).
- b. Records of performance tests, fuel analyses, or other compliance demonstrations and performance evaluations as required in 40 CFR 63.10(b)(2)(viii).
- c. For each CEMS and continuous monitoring system, the Permittee must keep records according to 40 CFR 63.7555(b)(1) through (5).
- d. Records required in Table 8 of 40 CFR 63 Subpart DDDDD including records of all monitoring data and calculated averages for applicable operating limits, such as opacity, pressure drop, pH, and operating load, to show continuous compliance with each emission limit and operating limit.
- e. Applicable records in 40 CFR 63.7555(d)(1) through (11).
- f. For a unit in the unit designed to burn gas 1 subcategory that is subject to 40 CFR 63 Subpart DDDDD, and an alternative fuel other than natural gas, refinery gas, gaseous fuel subject to another subpart under 40 CFR Part 63, other gas 1 fuel, or gaseous fuel subject to another subpart of 40 CFR Part 63 or Part 60, 61, or 65 is used, the Permittee must keep records of the total hours per calendar year that alternative fuel is burned and the total hours per calendar year that the unit operated during periods of gas curtailment or gas supply emergencies.
- g. Records of the calendar date, time, occurrence and duration of each startup and shutdown.
- h. Records of the type(s) and amount(s) of fuels used during each startup and shutdown.

6.2.36 For 40 CFR 63 Subpart DDDDD, the Permittee shall maintain records as follows:

- a. Records shall be in a form suitable and readily available for expeditious review.
[40 CFR 63.10(b)(1) and 40 CFR 63.7560(a)]

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- b. Records shall be kept for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.
[40 CFR 63.10(b)(1) and 40 CFR 63.7560(b)]
- c. Each record shall be kept on site, or they must be accessible from on site (for example, through a computer network), for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 CFR 63.10(b)(1). The Permittee can keep the records off site for the remaining 3 years.
[40 CFR 63.10(b)(1) and 40 CFR 63.7560(b)]

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